

REMARKS

Claims 1, 3-6, 10-12, 16, 19-22, 26, 29 and 40-53 are active in this application. The Applicants thank Examiner Kerr for indicating the allowability of Claims 1, 3-6, 10-12, 19-22, 26 and 29. These claims are directed to polynucleotide sequences which encode SEQ ID NO: 2. Claim 11 has been amended to refer to the coding part of SEQ ID NO: 1. Support for this change is found in the original sequence listing which identifies nucleotides 491-1471 as the coding sequence. Claim 16 has been amended for further clarity and again refers to complementary sequences. The Official Action of March 30, 2004 (section 23) indicated that the polynucleotide of Claim 16 was considered to be double-stranded and that recitation of complementary sequences was redundant. However, Claim 16 now refers to fragments of SEQ ID NO: 1 "consisting of" certain polynucleotide fragments. To clarify that this language does not exclude complementary sequences the term "or the full complement thereof" has been introduced. A "full complement" does not contain mismatched base pairs when annealed to the corresponding polynucleotide sequence. Claims 13-15, 17, 27, 28 and 39 which had been directed to sequences homologous or similar to SEQ ID NO: 1 have been cancelled.

New Claims 40-43, which are directed to a method for producing an L-amino acid, find support in the specification on page 2, lines 10-19, and in Example 5 on page 19. These claims correspond to subject matter previously withdrawn from consideration. However, the Applicants respectfully request their rejoinder and examination upon an indication of allowability for the underlying product claims.

New Claims 44-49 involve polynucleotide sequences which encode functional (*OxyR*) polypeptide fragments of SEQ ID NO: 2 and find support in specification, page 5, lines 19-20 and lines 26-30, and page 8, lines 6-19.

Claims 50 and 51 describe cells having multiple copies of a gene. Support for these claims is found in the specification on page 6, line 5 and on page 9, lines 21-22. Claim 52 describes sequences enhanced by placement under the control of a promoter or other regulatory sequence. Support for this amendment is found on page 9, lines 22-26 of the specification. In view of the amendment of Claim 11, Claim 53 has been added to refer to SEQ ID NO: 1. Support for the amendment is indicated above. Therefore, the Applicants do not believe that any new matter has been added.

The Applicants thank Examiner Kerr for the telephonic discussion of October 21, 2004. It was suggested that the Applicants direct the claims to sequences which encode the polypeptide of SEQ ID NO: 2 and consider canceling claims directed to variant polynucleotides, such as polynucleotides having at least 90% similarity with SEQ ID NO: 1.

To address the prior art rejection, it was suggested that the Applicants point out descriptive support in the English translation of the priority document for the rejected subject matter. Such support is indicated in the remarks below.

The Examiner agreed to consider claims directed to fragments of SEQ ID NO: 2 which have *OxyR* activity (see new Claims 44-49) if descriptive support could be pointed out for such fragments, however no formal indication of the allowability of such claims was made. Fragments of SEQ ID NO: 2 are described in the specification on page 5, lines 24-30 and on page 8, see e.g., lines 1-5 and lines 12-19.

The Applicants have now amended the claims as discussed above and provide additional remarks below in support of patentability of the amended claims. Favorable consideration and allowance of this application is now respectfully requested.

Rejection—35 U.S.C. §112, first paragraph

Claims 13-15, 17 and 27 (and Claims 28 and 39) were rejected under 35 U.S.C. 112, first paragraph, as lacking adequate enablement for polynucleotide sequences which are structurally-related to polynucleotides encoding SEQ ID NO: 2, for example, polynucleotides having 90, 95 or 99% homology to SEQ ID NO: 1 or which hybridize to this sequence under stringent conditions. This rejection is moot in view of the amendments above.

Rejection—35 U.S.C. 102(e)

Claims 15 and 16 were rejected under 35 U.S.C. 102(e) as being anticipated by Nakagawa et al., USPAP 20020197605. The rejection of Claim 15 is moot since it has been cancelled. Claim 16 has been amended to refer to polynucleotides consisting of fragments of SEQ ID NO: 1 (or fully complementary sequences).

Nakagawa does not disclose or suggest fragments of SEQ ID NO: 1, but discloses a 3,309,400 long polynucleotide sequence. Part of this sequence Db2028687-2030361 corresponds to SEQ ID NO: 1 according to the sequence alignment provided. However, Nakagawa et al. do not disclose or suggest particular fragments of SEQ ID NO: 1. Thus, the Applicants respectfully submit that this document does not disclose with sufficient specificity or suggest internal fragments of SEQ ID NO:1 and therefore cannot anticipate or render obvious Claim 16.

Moreover, priority application DE 100 42 052.4, filed August 26, 2000, fully discloses the polynucleotide sequence of SEQ ID NO: 1 and the amino acid sequence of SEQ ID NO: 2, see pages 28-31. Page 4, lines 9-10, of this priority document explicitly disclose fragments of SEQ ID NO: 1. Accordingly, the Applicants respectfully request that this rejection be withdrawn, because Nakagawa does not disclose or suggest the claimed

fragments of SEQ ID NO: 1 and is not prior art for SEQ ID NO: 1 or fragments of SEQ ID NO: 1 based on the filing date of the priority document.

CONCLUSION

In view of the above amendments and remarks the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

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